भारतीय मानक Indian Standard

वस्त्रादि — हथकरघा से निर्मित सूती विरंजित मुस्लिन — विशिष्टि

IS 752: 2023

(दूसरा पुनरीक्षण)

Textiles — Handloom Cotton Muslin, Bleached — Specification

(Second Revision)

ICS 59.080.30

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textiles Division Council.

Muslin is a smooth, delicately woven fabric, which is cool, comfortable and very affordable. Muslin is fine and light, so it is ideal for lightweight summer clothing and muslin blankets and wraps for babies. Muslin is used for household cleaning cloths and in some types of food production, such as cheesemaking.

Muslin also has many uses in crafting and fashion design and manufacturing. It can be used as a backing and lining for quilts (such as patchwork quilts). Muslin is a good fabric to use for fabric dyeing and printing projects as it is inexpensive and plain. It is also commonly used for making mock-ups of patterns to test the fit before you cut into more expensive fabric.

Surgeons use muslin gauze in cerebrovascular neurosurgery to wrap around aneurysms or intracranial vessels at risk for bleeding.

This standard was originally published in 1955 and was subsequently revised in 1984. The standard has again been revised to incorporate the following major changes:

- a) Method of test for count of yarn along with its tolerance has been specified;
- b) Tolerances for ends/dm, picks/dm and mass have been modified;
- c) Test method for identification of material has been incorporated;
- d) Sampling plan has been updated;
- e) BIS certification marking clause has been modified; and
- f) References to Indian Standards have been updated.

The composition of the Committee responsible for the formulation of this standard is given in Annex C.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — HANDLOOM COTTON MUSLIN, BLEACHED — SPECIFICATION

(Second Revision)

1 SCOPE

This standard prescribes the constructional particulars and other requirements of five varieties of handloom cotton muslin, bleached.

2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

3 TERMINOLOGY

3.1 Muslin — A generic term for a light weight open cloth of plain or plain gauze weave. Normally muslins do not exceed 68 g/m². In some cases, grey fabric is used for example butter muslin and cheese cloth, whereas for others (dress material) bleached and dyed muslin is used.

4 MANUFACTURE

4.1 Yarn

The cotton yarn used in the manufacture of muslin shall conform to IS 171.

4.2 Cloth

The muslin shall be free from substances liable to cause subsequent tendering.

5 REQUIREMENTS

5.1 The constructional particulars of muslin shall

conform to those given in Table 1.

- **5.2** The requirements of muslin shall also conform to the requirements given in Table 2.
- **5.3** If, in order to illustrate or specify the interminable characteristics, such as general appearance, lustre, fuel, and shade of muslin, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.
- **5.3.1** The custody of the sealed sample shall be a matter of prior agreement between buyer and the seller.

6 INSPECTION

- **6.1** The muslin when visually inspected shall be reasonably free from the major flaws listed in Annex B.
- **6.1.1** The number of permissible major flaws per unit length shall be as agreed to between the buyer and the seller.

7 SAMPLING

7.1 Lot

The quantity of handloom cotton muslin of the same variety, width delivered to a buyer at a time shall constitute a lot.

- **7.2** To ascertain the conformity of the lot to the requirements of this standard, samples shall be drawn and inspected from each lot separately.
- **7.3** The number of pieces to be selected at random for inspection shall be in accordance with Table 3.

Table 1 Constructional Particulars of Handloom Cotton Muslin

(*Clause* 5.1)

Sl No.	Variety No.		: Cotton Count, (tex)	Ends/dm	Picks/dm	Mass	Length	Width	Weave
		Warp	Weft			g/m ²	m	cm	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
i)	1	60s (9.8 tex)	60s (9.8 tex)	260	230	50			
ii)	2	64s (9.2 tex)	80s (7.4 tex)	280	220	40		107 to	
iii)	3	80s (7.4 tex)	80s (7.4 tex)	300	290	45	20 or as declared	137 or as	Plain
iv)	4	100s (6 tex)	80s (7.4 tex)	380	350	48	deciarea	agreed	
v)	5	120s (4.9 tex)	100s (6 tex)	430	300	40			
Tolerance, Percent	_	± 5	± 5	± 5	± 5	± 5	see Note	± 2	_
Method of Test, Ref to	_	IS 3	3442	IS 1	1963	IS 1964	IS 1	954	Visual
NOTE — The length shall not less than the declared or marked value.									

Table 2 Requirements of Handloom Cotton Muslin, Bleached

(*Clause* 5.2)

Sl No.	Characteristics	Requirements	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Dimensional change percent, Max	4	IS 2977
ii)	Scouring loss percent, Max	2.5	IS 1383
iii)	Fibre identification	100 percent cotton	IS 667

Table 3 Sample Size and Permissible Number of Non-Conforming Pieces

(*Clause* 7.3)

Sl No.	Lot Size	Sample Size	Permissible No. of Non- conforming Pieces	Sub-sample Size
(1)	(2)	(3)	(4)	(5)
i)	Up to 90	5	0	3
ii)	91 to 150	8	0	3
iii)	151 to 500	13	1	5
iv)	501 to 1 200	20	1	5
v)	1 201 to 10 000	32	2	8
vi)	10 001 to 35 000	50	3	8
vii)	35 001 to 500 000	80	5	13
viii)	500 001 and above	125	7	13

7.4 For Selection of samples at random from the lot, procedure given in IS 4905 may be followed:

7.5 Number of Tests and Criteria of Conformity

Sl No.	Characteristics	Number of Tests	Criteria for Conformity
(1)	(2)	(3)	(4)
i)	Ends, picks, mass, length and width, indeterminable characteristics and visual inspection	According to col (2) of Table 3	Number of non-conforming pieces not exceed the corresponding number given in col (3) of Table 3
ii)	Dimensional change, scouring loss and fibre identification	According to col (4) of table 3	All the test specimens shall meet the requirements

8 MARKING

8.1 The muslin shall be suitably marked or labelled with the following information:

- a) Manufacturer's name, initials or trademark;
- b) Name of the material and variety number;
- c) GSM (g/m²);
- d) Length (m) and width (cm) of piece; and
- Other declarations required as per law in force.

8.2 BIS Certification Marking

The product(s) conforming to the requirements of

this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

9 PACKING

Unless otherwise agreed upon the buyer and the seller, the cloth shall be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

ANNEX A

(Clause 2)

LIST OF REFERRED STANDARDS

IS No.	Title	IS No.	Title
IS 171 : 1993	Textiles — Ring spun grey cotton yarn for weaving — Specification (fourth revision)	IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics (second
IS 293: 1980	Code of seaworthy packaging of cotton yarn and cloth (third revision)	IS 1964 : 2001	revision) Textiles — Methods for determination of mass per unit
IS 667 : 1981	Methods for identification of textile fibres (<i>first revision</i>)		length and mass per unit area of fabrics (second revision)
IS 1347 : 1972	Specification for inland packaging of cotton cloth and yarn (first revision)	IS 2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (first revision)
IS 1383 : 1977	Methods for determination of scouring loss in grey and finished cotton textile materials (first revision)	IS 3442 : 2023	Textiles — Method for determination of crimp and linear density of yarn removed from fabric (second revision)
IS 1954 : 1990	Determination of length and width of woven fabrics — Methods (second revision)	IS 4905 : 2015/ ISO 24153 : 2009	Random sampling and randomization procedures (first revision)

ANNEX B

(Clause 6.1)

LIST OF MAJOR FLAWS

- a) More than two adjacent ends running parallel, broken or missing and extending beyond 20 cm;
- b) Weft crack of more than 2 missing picks across the width of the material;
- Prominently noticeable weft bar due to the unevenness in raw material, count, twist, lustre etc;
- d) Noticeable selvedge defects;
- e) Noticeable warp or weft float in the body;
- f) Noticeable oil or other stains;

- g) Noticeable hole, cut or tear up to 3 mm in size:
- h) Smash rupturing the texture of the fabric;
- j) Undressed snarl noticeable throughout the piece;
- k) Conspicuous gout due to foreign matter, usually limit or waste woven into cloth;
- m) Conspicuous broken pattern; and
- n) Any other flaw which would mar the appearance or affect the serviceability and/or durability of the cloth.

ANNEX C

(Foreword)

COMMITTEE COMPOSITION

Handloom and Khadi Sectional Committee, TXD 08

Organization Representative(s)

Weavers Service Centre, Delhi Shri Vishesh Nautiyal (*Chairperson*)

SHRI VIKAS KUMAR (Alternate)

Baster Adimjati Sewak Sangh, Baster Shri Sumit Das

SHRI AMIT DAS (Alternate)

Central Pollution Control Board, New Delhi Shri P. K. Mishra

SHRI RISHABH SRIVASTAV (Alternate)

Central Reserve Police Force, New Delhi Shri D. P. UPADHYAY

SHRI SANJEEV KUMAR SINGH (Alternate)

Department of Handlooms & Textiles, Chennai Shri T. P. Rajesh

DR K. KARNAN (Alternate)

Gandhigram Rural Institute, Dindigul REPRESENTATIVE

Haryana Khadi Gramodyog Sangh, Karnal Shri Pawan Garg

SHRI R. S. YADAV (Alternate)

ICAR – Central Institute for Research on Cotton Technology,

Mumbai

DR SUJATA SAXENA

DR A. S. M. RAJA (Alternate)

Indian Institute of Handloom Technology, Varanasi DR P. THENNARASU

Indian Institute of Handloom Technology, Jodhpur DR J. SIVAGNANAM

Indo Tibetan Border Police, New Delhi Shri Uttam Kumar

SHRI ANAND KUMAR (Alternate)

Jan Sewa Ashram, Aligarh Shri R. K. Sharma

SHRI AKHILESH KUMAR AWASTHI (Alternate)

Karnatka Khadi Gramodyog Samyuktha Sangha, Hubli SHRI K. V. PATTAR

SHRI SHIVANANDA S. (Alternate)

Khadi & Village Industries Commission, New Delhi Shri P. Nallamuthu

SHRI RAM NARAYAN (Alternate)

Khadi Dyers & Printers, Mumbai Shri D. N. Bhatt

 $Shri\ V.\ D.\ Joshi\ (\textit{Alternate})$

Khadi Gramodyog Mandal, Rampur Shri Rakesh Chaudhary

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Kshetriya Khadi Gramodyog Samiti, Dausa SHRI R. K. SINGH

Madhya Bharat Khadi Sangh, Gwalior Shrimati Neelu Mekle

SHRI HARISH MEKLE (Alternate)

Mahatma Gandhi Institute for Rural Industrialization, Wardha REPRESENTATIVE

Organization

Representative(s)

Metpalli Khadi Gramodyog Pratisthan, Metpalli SHRI G. MADHAV

Ministries of Defence (DGQA), New Delhi SHRI ARVIND COMPATHANE

SHRI N. SENTHIL KUMAR (Alternate)

Ministries of Health, New Delhi REPRESENTATIVE

National Handloom Development Corporation Ltd, Gautam DR SAKTHIVEL PERUMALSAMY

Budh Nagar SHRI JITENDRA TOLAMBIYA (Alternate)

Northern Railways, New Delhi SHRI SUDHANSHU KUMAR GUPTA

Northern India Textile Research Association, Ghaziabad DR M. S. PARMAR

SHRI SANJEEV SHUKLA (Alternate)

Office of The Development Commissioner for Handlooms, SHRI SIDDHARTH SINGH

New Delhi

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Rastriya Khadi Gramodyog Federation, Moradabad SHRI ANIL KUMAR SINGH SHRI KULDEEP SINGH (Alternate)

Sushil Gramodyog Sanstha, Ghaziabad SHRI SUNIL TYAGI

Swastik Gramodyog Samiti, Delhi SHRI M. L. PATHAK

SHRI ABHISHEK DIXIT (Alternate)

Textiles Committee, New Delhi SHRI KARTIKAY DHANDA

SHRIMATI SHILPI CHAUHAN (Alternate)

The Cotton Textiles Export Promotion Council (TEXPROCIL),

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